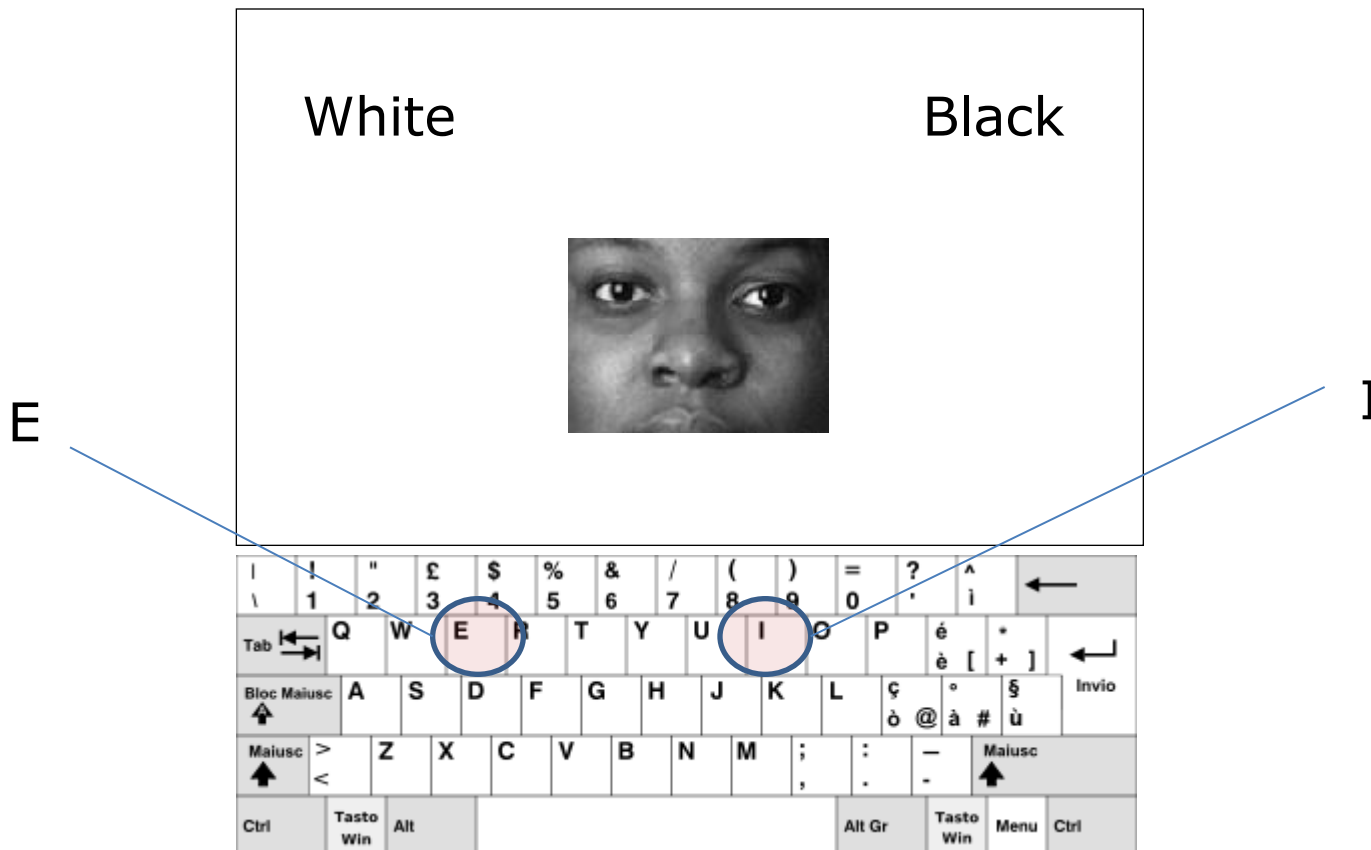# Implicit Measures

Gawronski, B. (2009). Ten Frequently Asked Questions About Implicit Measures and Their Frequently Supposed, But Not Entirely Correct Answers. Canadian Psychology, 50 (3), 141-150.

Implicit Measures

Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998)

- The tasks consists of 5 blocks:
  1. practice – category (e.g., white vs. black)

White   Black

E   I

Implicit Measures
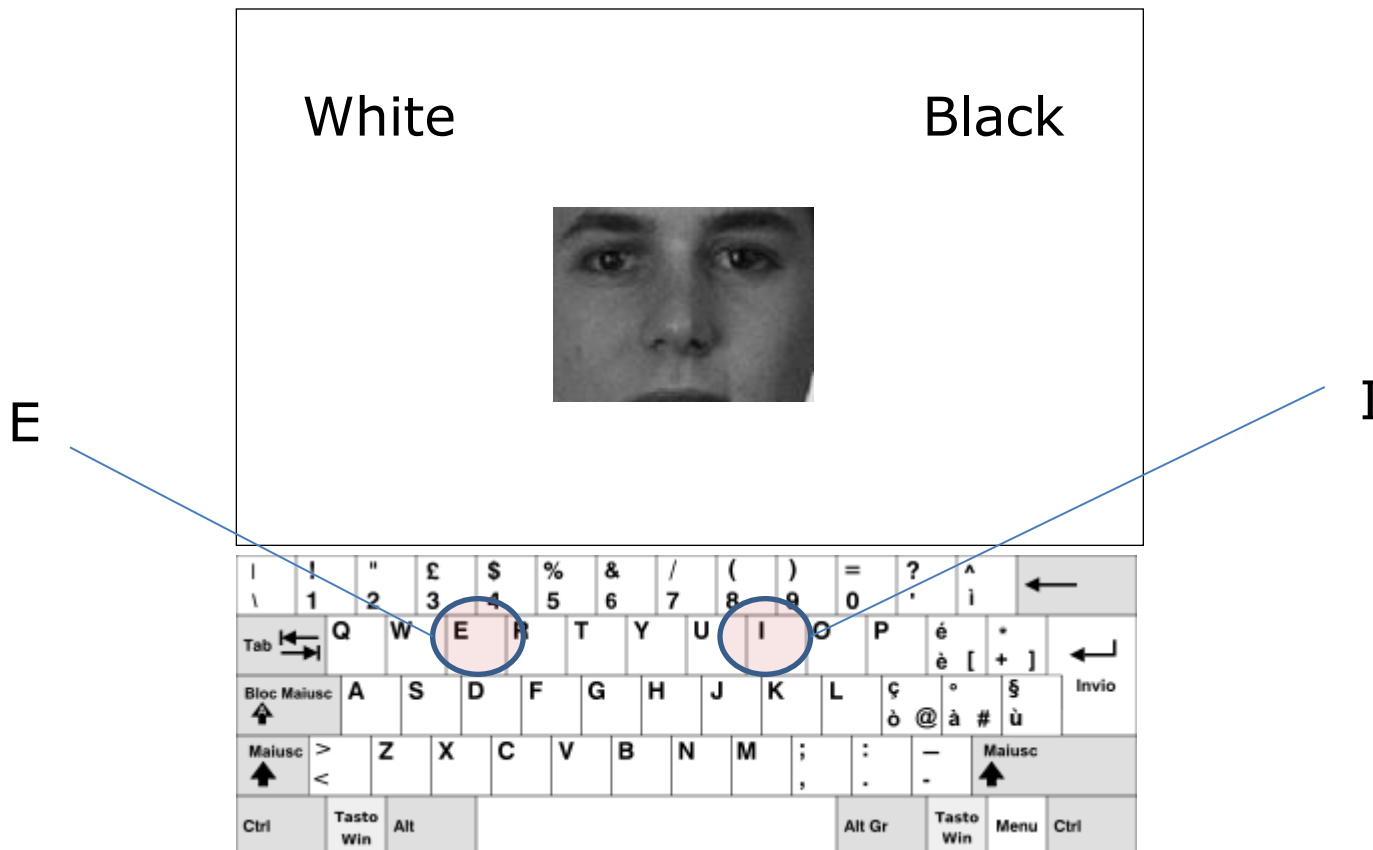
Implicit Association Test

- The tasks consists of 5 blocks:
  1. practice – category (e.g., white vs. black)

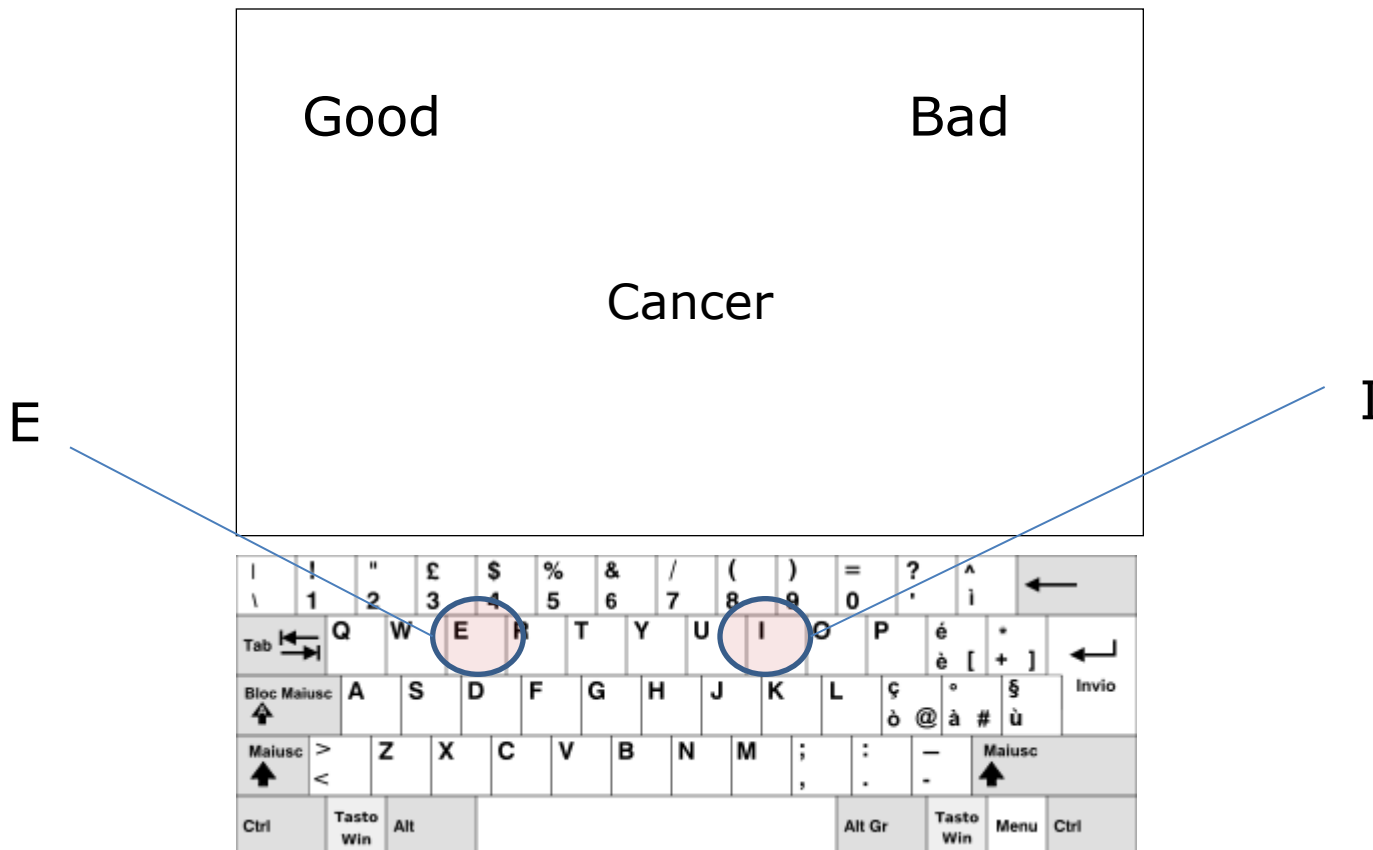# Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:
  2. practice – attribute (e.g., good vs. bad)

Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:
  2. practice – attribute (e.g., good vs. bad)

Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:
  3. test – prejudice congruent (white + good vs. black + bad)

Implicit Measures

Implicit Association Test

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Implicit Measures

Implicit Association Test

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Implicit Measures

Implicit Association Test

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  3. test – prejudice congruent (white + good vs. black + bad)

Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:
  4. practice – attribute (inverted keys)

Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:

  5. test – prejudice incongruent (white + bad vs. black + good)

Implicit Measures

Implicit Association Test

- The tasks consists of 5 blocks:
  5. test – prejudice incongruent (white + bad vs. black + good)

Implicit Measures

*Implicit Association Test*

- The order of the congruent and incongruent test blocks is generally counterbalanced so that half participants complete the congruent block first while the other half complete the incongruent block first.

- The IAT measure the strenght of association between **pairs** of concepts. The IAT effect is generally computed as the difference between the average latency in the incongruent block and the average latency in the congruent block (for a detailed explanation of the algorithm see Greenwald et al., 2003). In the race IAT, for instance, the higher the score the higher the prejudice against Blacks *compared to* Whites.

- The assumption is that responses will be faster in the congruent than in the incongruent block. Faster responses reflect stronger mental associations between concepts.

Implicit Measures

*Evaluative priming task (*Fazio, Jackson, Dunton, & Williams, 1995)

Fixation point

mask

Prime

mask

Bad   Good

Cancer
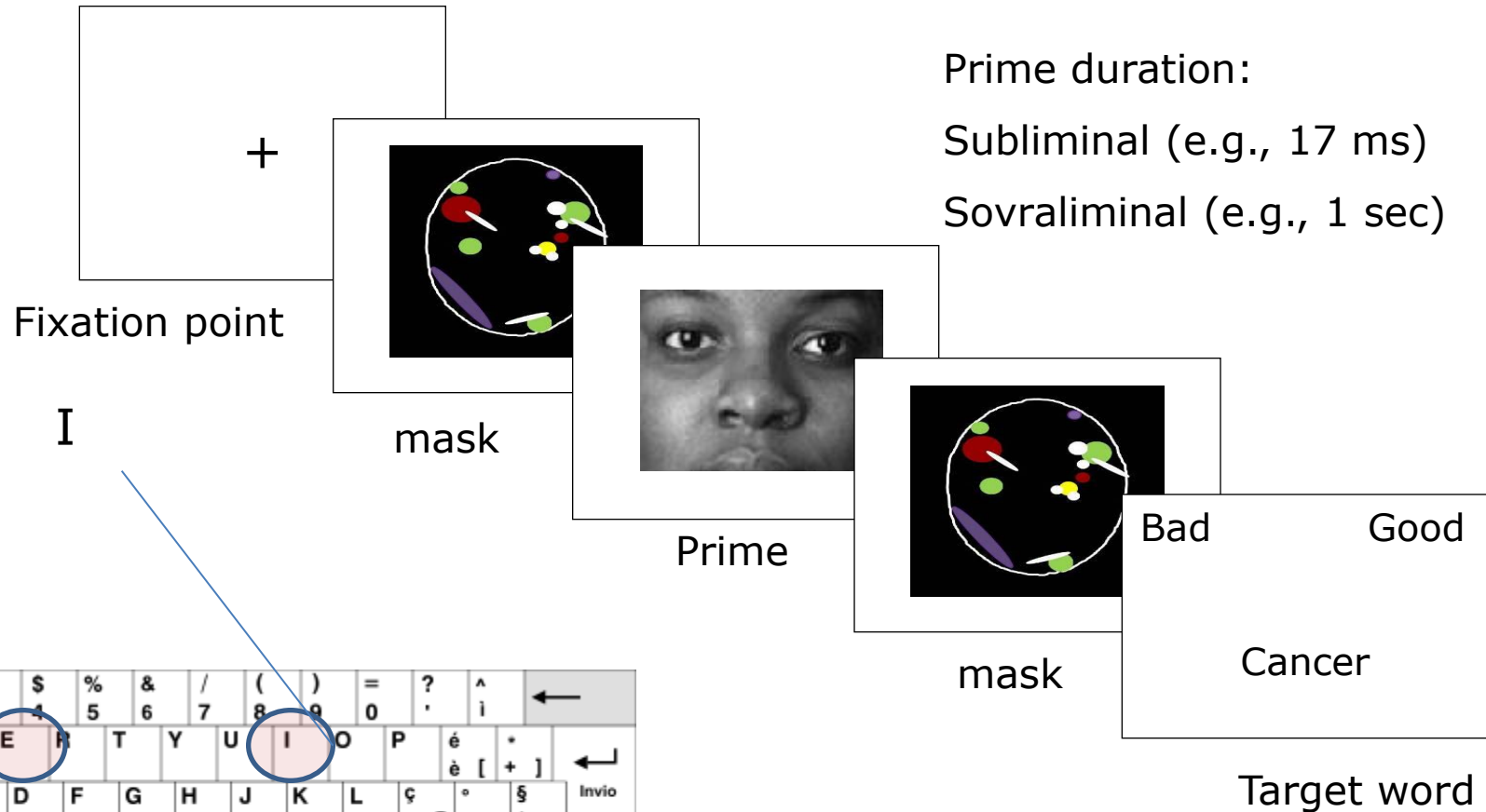
Target word

Prime duration:

Subliminal (e.g., 17 ms)
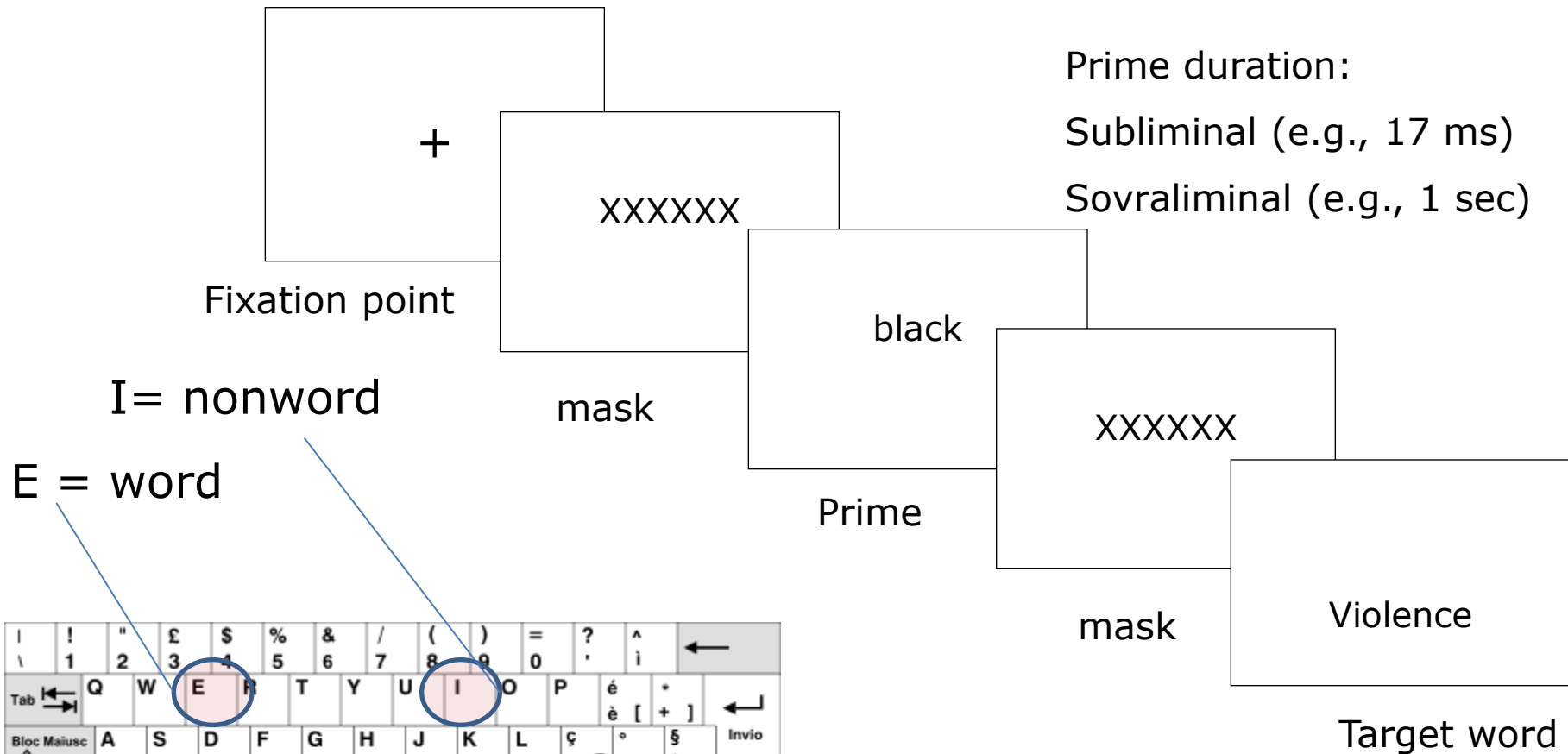
Sovraliminal (e.g., 1 sec)
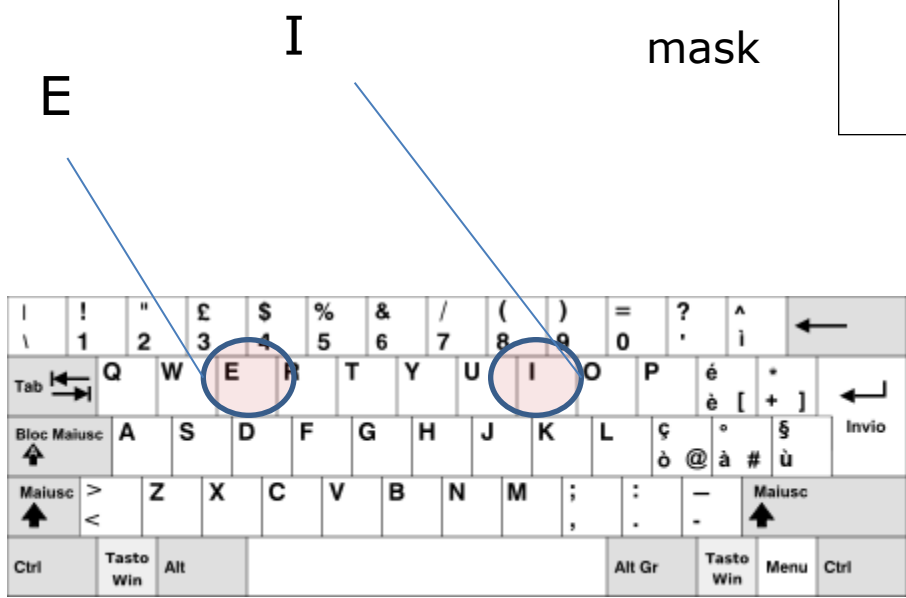
Implicit Measures

Evaluative priming task

- Two types of trials: congruent (Black prime followed by a negative target word) vs incongruent (Black prime followed by a negative target word). The faster the response to the negative words, the stronger the associative link between black and negative attributes.
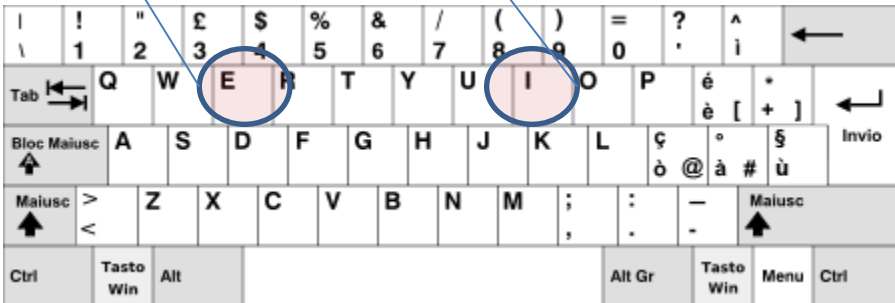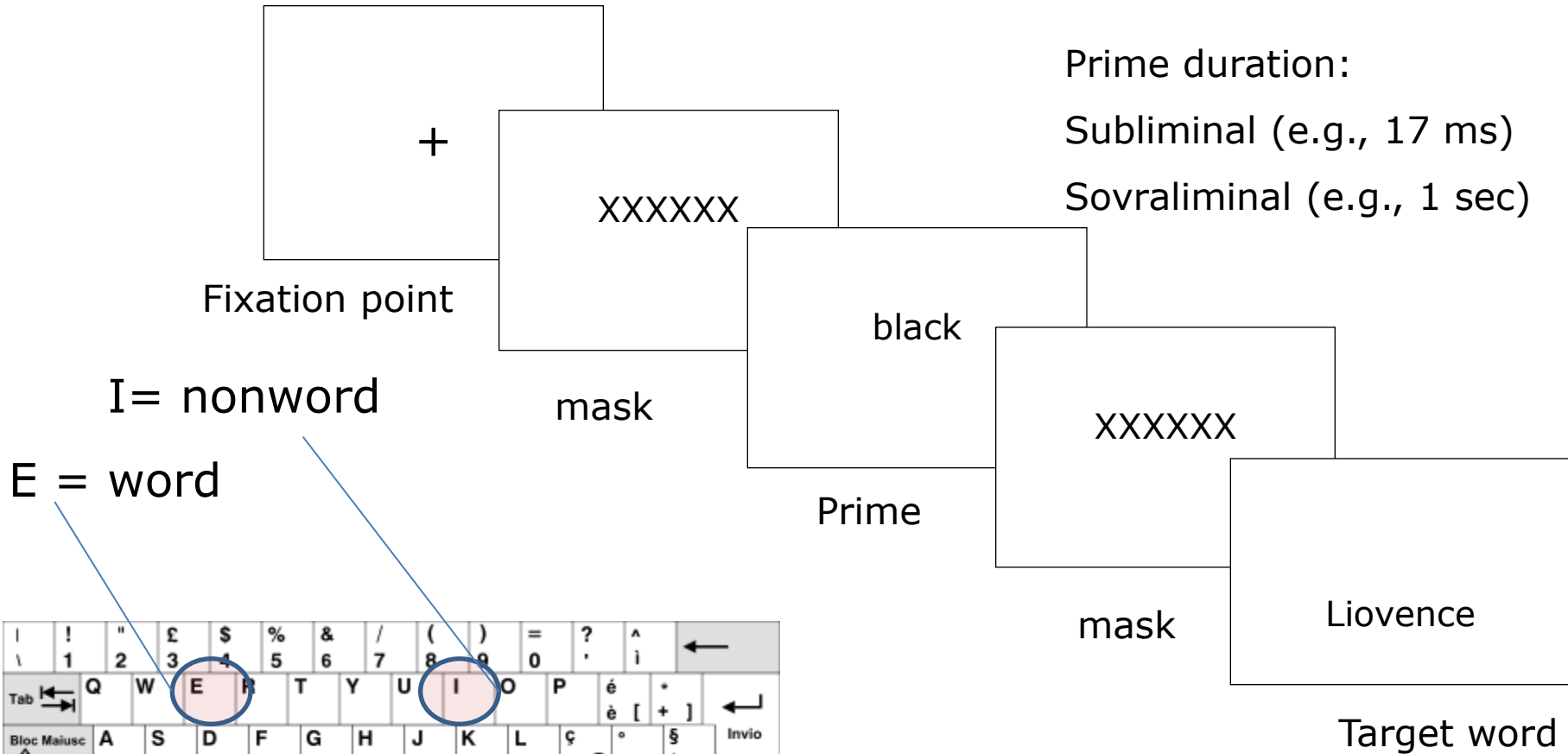
Implicit Measures

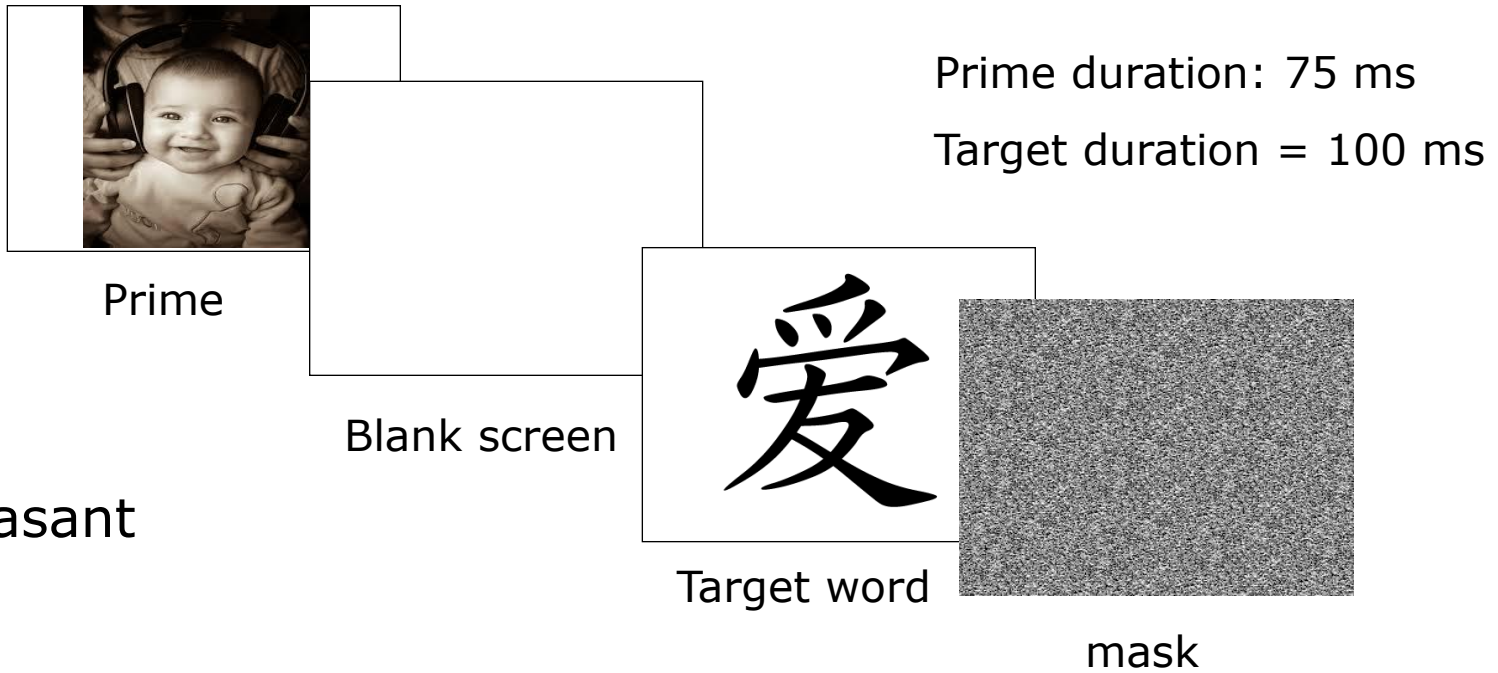*Semantic priming task* (Wittenbrink, Judd, & Park, 1997)

Prime duration:

Subliminal (e.g., 17 ms)

Sovraliminal (e.g., 1 sec)

+

Fixation point

XXXXXX

mask

black

Prime

XXXXXX

mask

Violence

Target word

I= nonword

E = word

Semantic priming task (Wittenbrink, Judd, & Park, 1997)

Fixation point

mask

Prime

black

XXXXXX

mask

XXXXXX

Liovence

Target word

Prime duration:

Subliminal (e.g., 17 ms)

Sovraliminal (e.g., 1 sec)

I= nonword

E = word

Implicit Measures

Affect misattribution procedure (Payne et al., 2005)

Prime

Blank screen

Target word

mask

Prime duration: 75 ms

Target duration = 100 ms

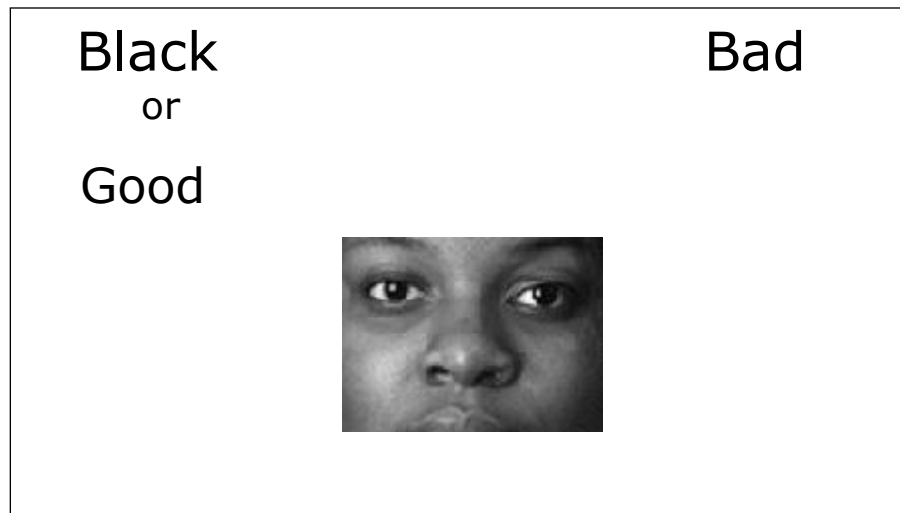E= unpleasant

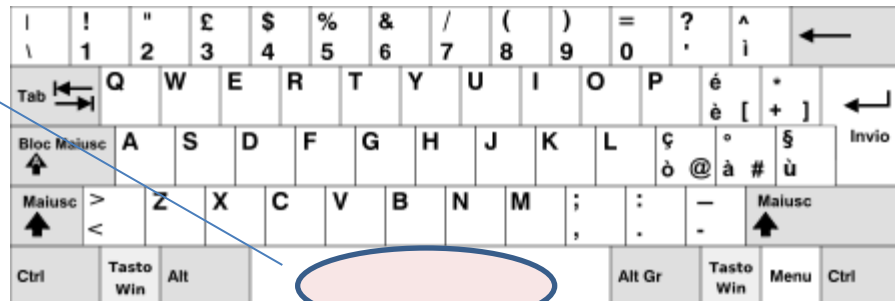I = pleasant

Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = Black):

    1. Target = black + good; distracter = bad

Press the spacebar = Go response

Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = Black):

    1. Target = black + good; distracter = bad

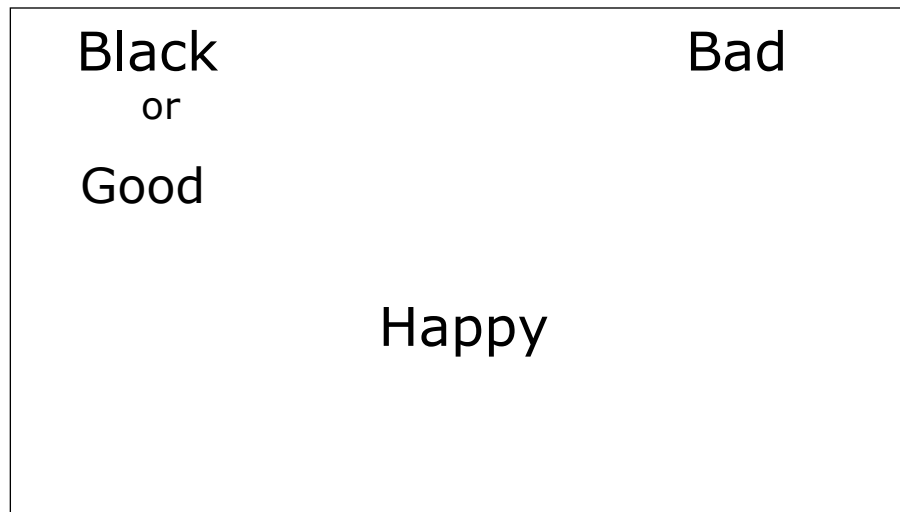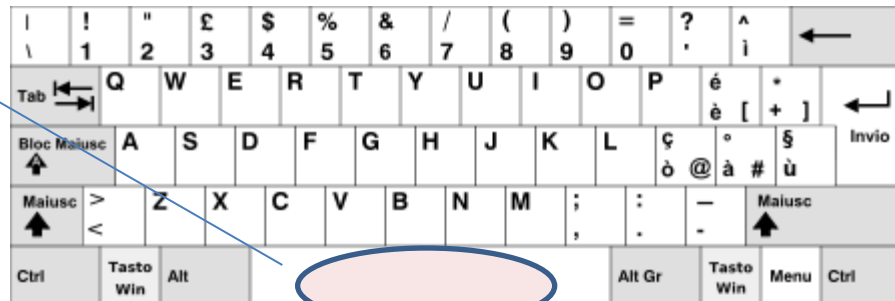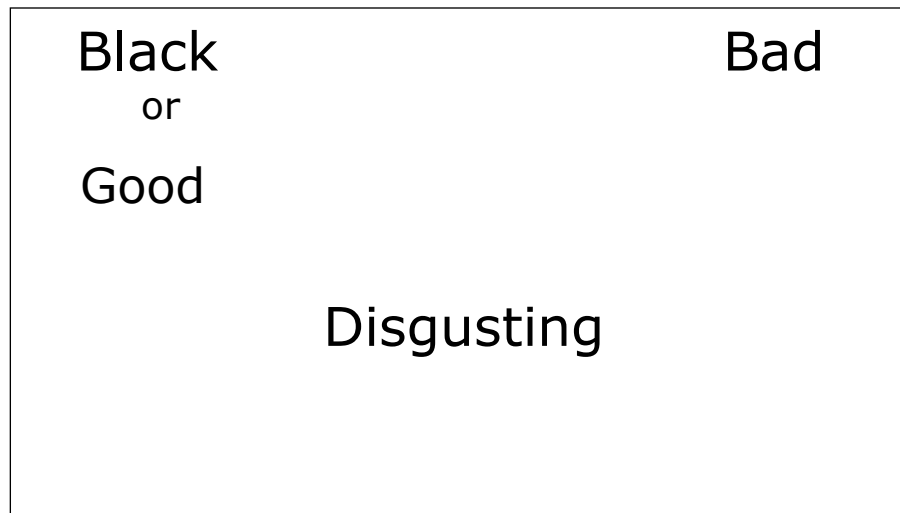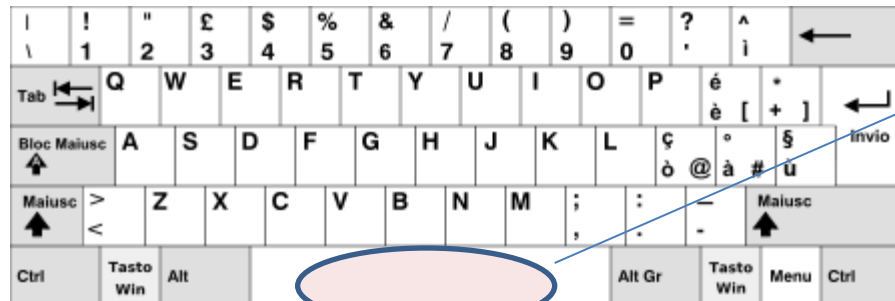

Press the spacebar = Go response

Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = Black):

    1. Target = black + good; distracter = bad

Black   Bad

or

Good

            Disgusting

Do not press the spacebar = No-go response

Implicit Measures

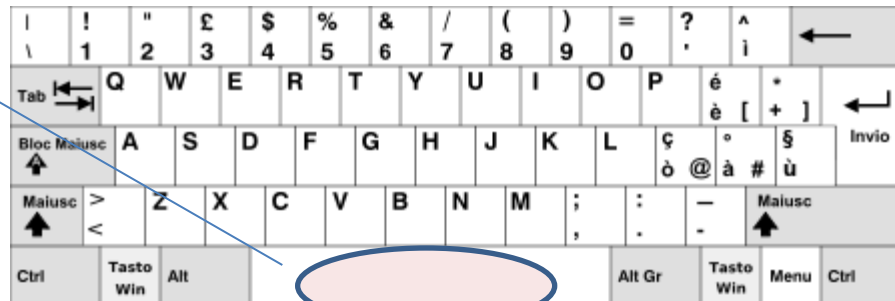*Go-No-go Association Task* (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = Black):

    2. Target = black + bad; distracter = good

Black   Good

    or

Bad

Press the spacebar = Go response
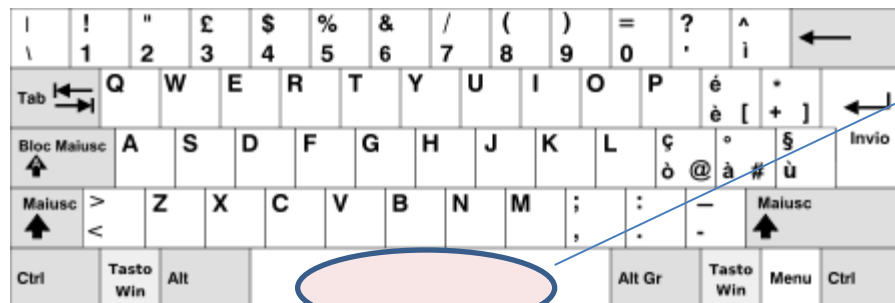
Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = Black):

    2. Target = black + bad; distracter = good

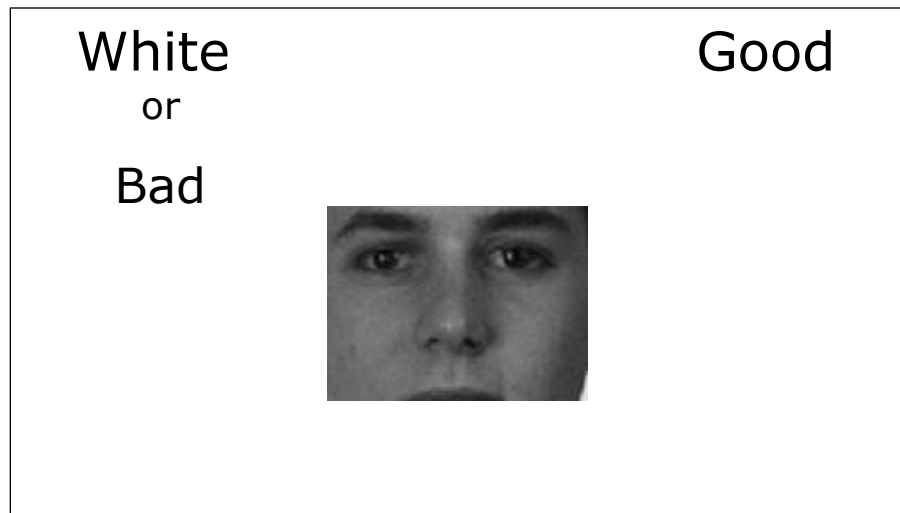

Do not press the spacebar = No-go response
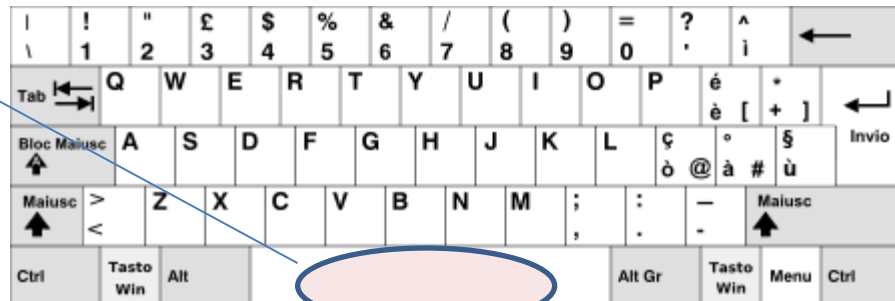
Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = White):

    1a. Target = white + bad; distracter = good
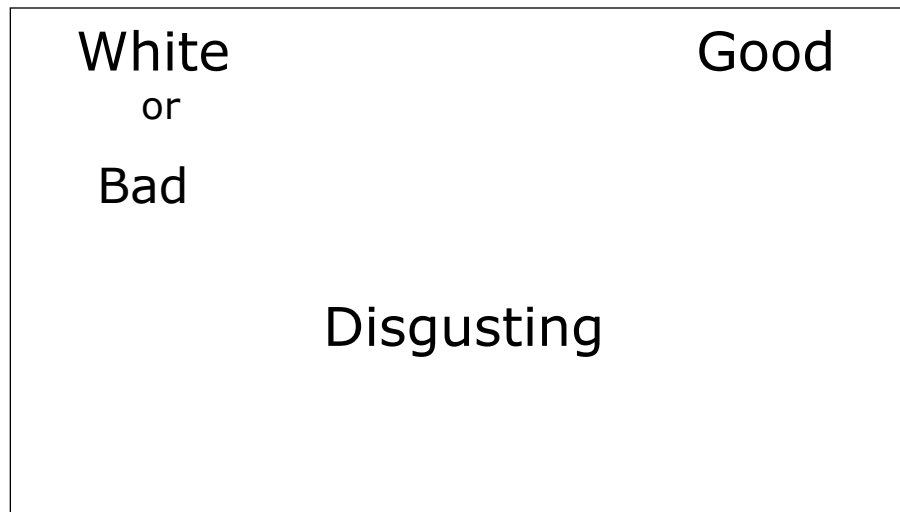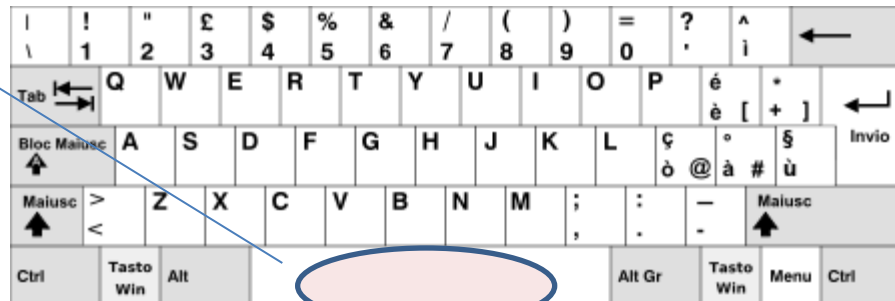

Press the spacebar = Go response

Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = White):

    1a. Target = white + bad; distracter = good

Implicit Measures

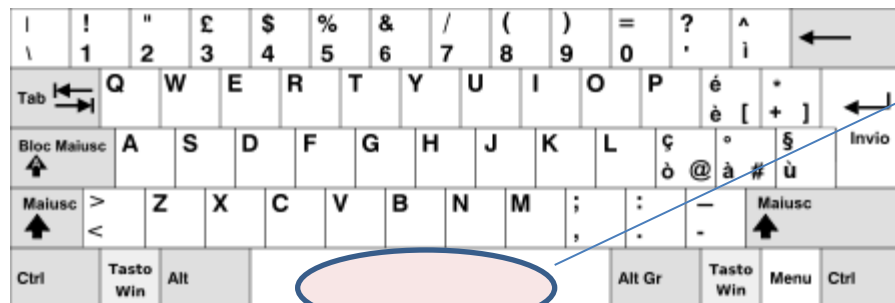*Go-No-go Association Task* (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = White):

    1a. Target = white + bad; distracter = good

White   Good

    or

Bad

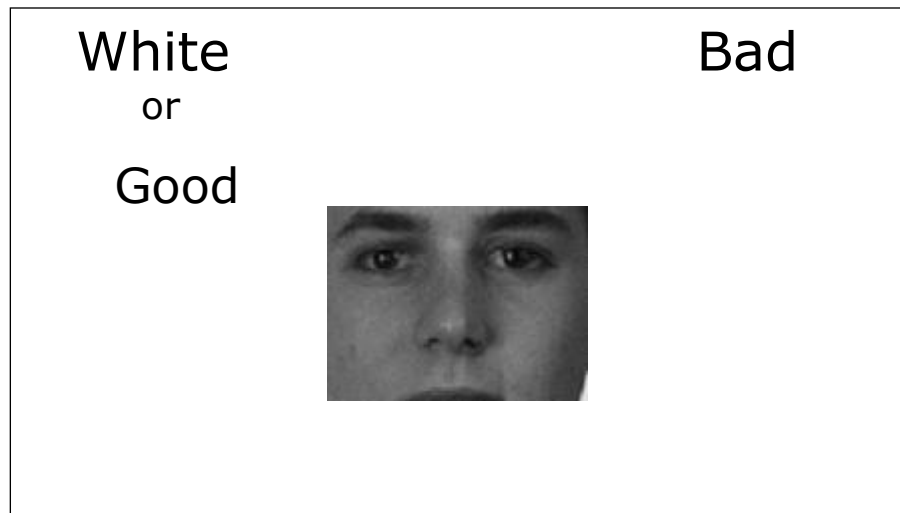   Happy

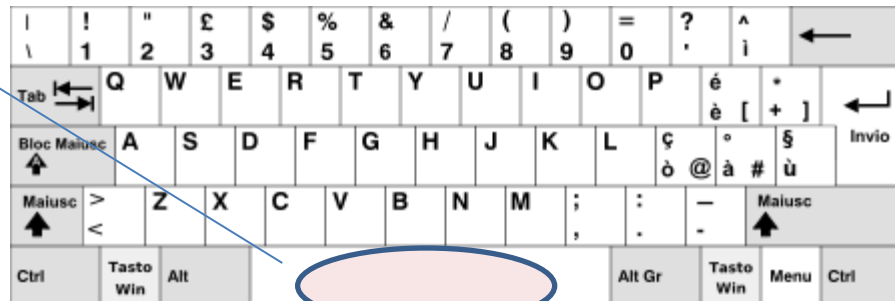Do not press the spacebar = No-go response

Implicit Measures

Go-No-go Association Task (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = White):

   2a. Target = white + good; distracter = bad

White   Bad

or

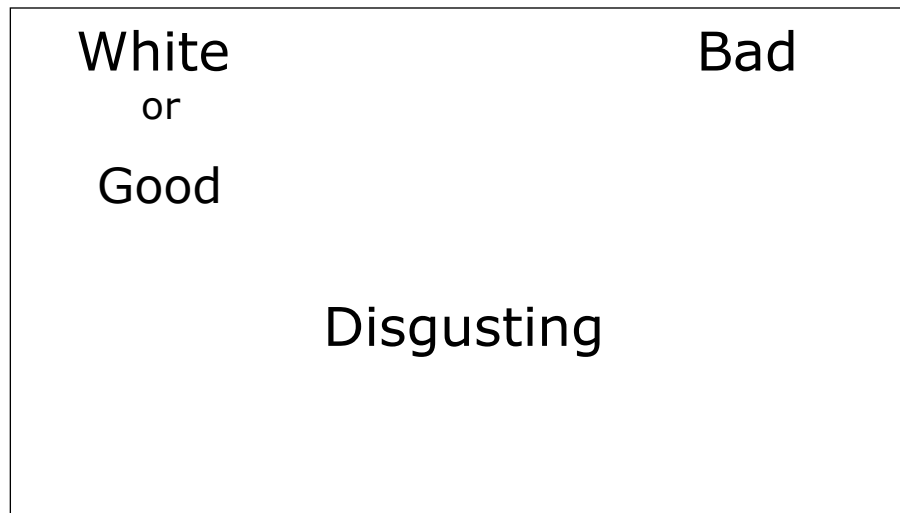Good

Press the spacebar = Go response

Implicit Measures

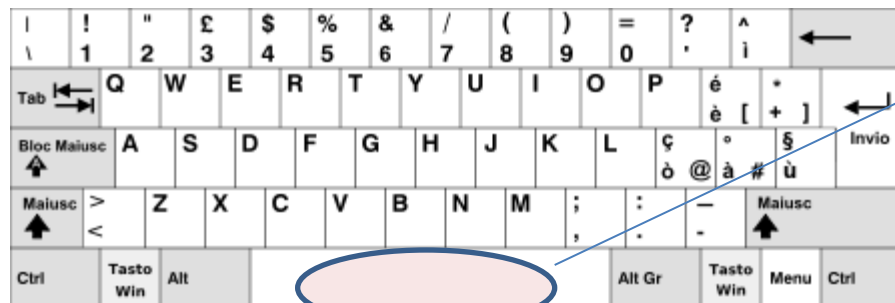*Go-No-go Association Task* (Nosek & Banaji, 2001)

The tasks consists of 2 blocks (TARGET = White):

2a. Target = white + good; distracter = bad

White   Bad

or

Good

Disgusting

Do not press the spacebar = No-go response

Implicit Measures

Approach-avoidance task

The tasks consists of 2 blocks:

    1. Approach a target (e.g., spiders) + Avoid a distracter (e.g., butterflies)

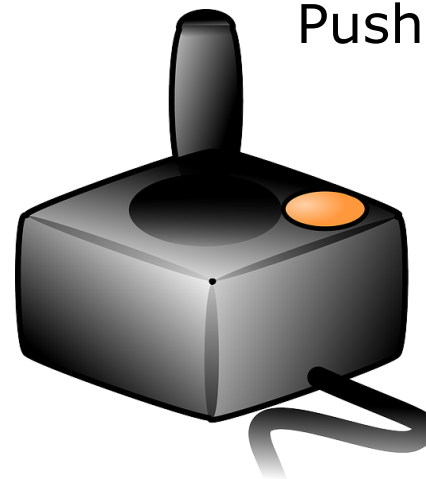Push = approach

Implicit Measures

Approach-avoidance task

The tasks consists of 2 blocks:

    1. Approach a target (e.g., spiders) + Avoid a distracter (e.g., butterflies)
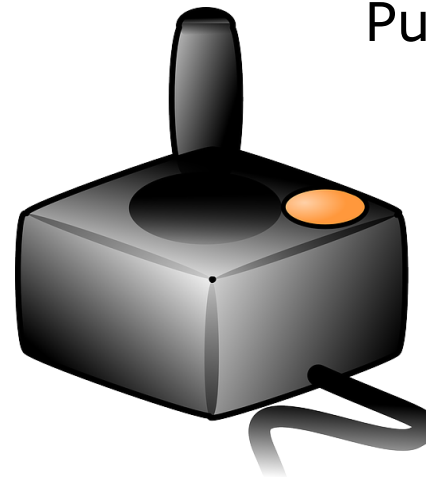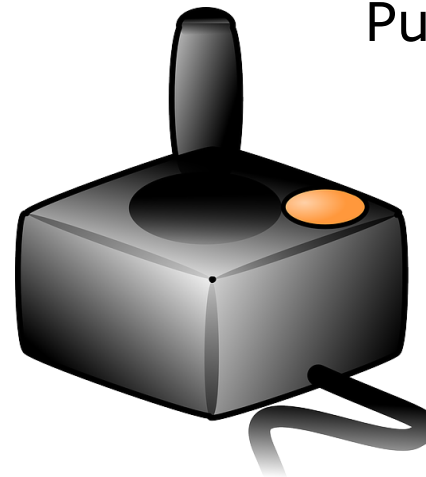

Pull = avoid

Implicit Measures

Approach-avoidance task

The tasks consists of 2 blocks:

    2. Avoid a target (e.g., spiders) + Approach a distracter (e.g., butterflies)
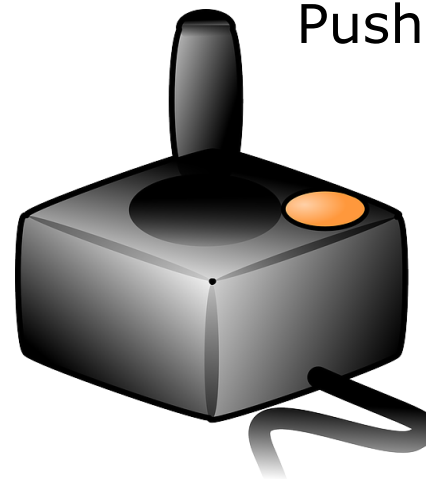
Pull = avoid

Implicit Measures

Approach-avoidance task

The tasks consists of 2 blocks:

    2. Avoid a target (e.g., spiders) + Approach a distracter (e.g., butterflies)

Push = approach

The AAT effect is the difference between the average latency in the two blocks.